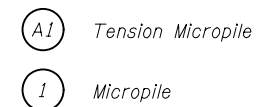


LOCATION	PIER 1 (STRAIGHT)		PIER 1 (BATTERED 1.5:12)		PIER 2 (BATTERED 2:12 TRANS. AND LONG.)		PIER 3 (STRAIGHT)		PIER 3 (BATTERED 1.5:12)		PIER 4 (STRAIGHT)		PIER 4 (BATTERED 1.5:12)			
	M2	M1	M3	M2	M1	M2	M1	A1	A2	A3	A4	A4	A4			
KIND	MICROPILE												TENSION MICROPILE			
TYPE	M2	M1	M3	M2	M1	M2	M1	A1	A2	A3	A4	A4	A4			
NUMBER	6	12	40	6	12	6	12	8	8	16	8	8	8			
FACTORED DESIGN BEARING OR AXIAL MICROPILE COMPRESSIVE RESISTANCE (k)	374	377	586	404	407	404	407	-	-	-	-	-	-			
FACTORED AXIAL MICROPILE TENSILE RESISTANCE (k)	298	298	530	298	298	298	298	521	340	336	481	481	481			
BOTTOM OF FOOTING ELEVATION (Ft.)	413.50	413.50	411.10	415.80	415.80	415.20	415.20	413.50	411.10	411.10	415.80	415.20	415.20			
MINIMUM ESTIMATED TIP OF PERMANENT STEEL CASING	365.50	365.50	387.70	377.50	377.50	378.50	378.50	-	-	-	-	-	-			
TOP OF MICROPILE ELEVATION (Ft.)	414.50	414.50	412.10	416.80	416.80	416.20	416.20	415.50	413.10	413.10	417.80	417.20	417.20			
ESTIMATED DEPTH TO BEDROCK	32'	32'	30.9'	33.3'	33.3'	30.7'	30.7'	32'	30.9'	30.9'	33.3'	30.7'	30.7'			
ESTIMATED TOTAL MICROPILE LENGTH	49'	49'	56'	39'	38'	37'	38'	61'	49'	45'	47'	46'	46'			



\* Micropile Proof Load Test

TYPE	MICROPILE DESCRIPTION	CASING OD	CASING WALL THICKNESS	CASING LENGTH	BAR SIZE	ROCK SOCKET DEPTH	DESIGN LOAD (COMPRESSION)	DESIGN LOAD (TENSION)	MICROPILE NUMBERS
A1	TENSION MICROPILE AT PIER 1 BATTERED 8:12 TRANS.	NA	NA	NA	#24	25.9'	0	508k	A1-A8
A2	TENSION MICROPILE AT PIER 2 BATTERED 8:12 TRANS.	NA	NA	NA	#20	18.3'	0	304k	A25-A32
A3	TENSION MICROPILE AT PIER 2 BATTERED 2:12 TRANS. AND 5.5:12 LONG.	NA	NA	NA	#20	16.9'	0	315k	A9-A24
A4	TENSION MICROPILE AT PIERS 3 AND 4 BATTERED 8:12 TRANS.	NA	NA	NA	#24	10.3' (Pier 3), 12.7' (Pier 4)	0	476k	A33-A48
M1	MICROPILE AT PIERS 1, 3 AND 4 BATTERED 1.5:12 LONG.	9 <sup>5</sup> / <sub>8</sub> "	0.465"	32'-0"	#18	20.6' (Pier 1), 9.6' (Pier 3), 10.6' (Pier 4)	371k	0	1-6, 13-18, 59-64, 71-82, 89-94
M2	MICROPILE AT PIERS 1, 3 AND 4 NO BATTER	9 <sup>5</sup> / <sub>8</sub> "	0.465"	32'-0"	#14	20.5' (Pier 1), 9.5' (Pier 3), 10.5' (Pier 4)	310k	0	7-12, 65-70, 83-88
M3	MICROPILE AT PIER 2 BATTERED 2:12 TRANS. AND LONG.	9 <sup>5</sup> / <sub>8</sub> "	0.465"	26'-0"	#24	30'	555k	210k	19-58

	USER NAME =	DESIGNED - ACK	REVISED	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>MICROPILE DETAILS - 1</b> <b>STRUCTURE NO. 014-0033</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	CHECKED - MJP	REVISED			42	1-1BR-2	CLINTON	159	116
	PLOT DATE = 2/1/2013	DRAWN - AEC	REVISED			CONTRACT NO. 76479				
		CHECKED - ACK	REVISED			ILLINOIS FED. AID PROJECT				